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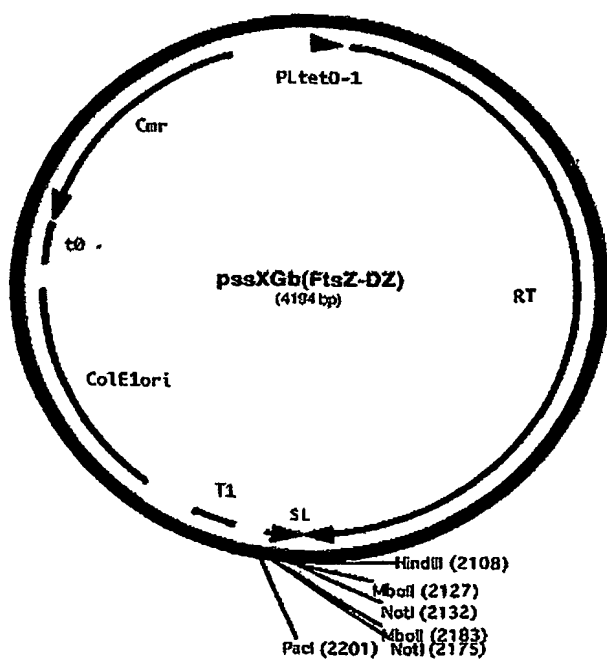
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(54) Title: NUCLEOTIDES FOR PREVENTION AND TREATMENT OF BACTERIAL AND FUNGAL PATHOLOGIES



(57) Abstract: A selectively inducible, single-stranded DNA (ssDNA) expression library, a method for constructing a ssDNA expression library, a method for screening ssDNA using the expression library, and a method for identifying ssDNA molecules that alter expression of bacterial and fungal gene(s) related to cell growth and toxin production and secretion. The screening library is used to, among other things, identify ODNs effective in stopping cell growth, killing bacteria or fungi, or preventing bacteria and/or fungi from synthesizing and secreting their toxins, and/or to discover ODNs effective in eukaryotic (e.g., mammalian) cells for targeted alteration of gene function. The library is also useful for identifying ssDNAs or ODNs that are used as therapeutic agents for, for instance, providing a method for treatment of bacterial infections such as sepsis.

WO 2004/108840 A2



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